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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,682	07/21/2003	Joseph A. King	5783	5313

7590

04/28/2005

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EXAMINER

TSOY, ELENA

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/623,682

Applicant(s)

KING ET AL.

Examiner

Elena Tsoy

Art Unit

1762

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 21 March 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 8-10 and 12.

Claim(s) withdrawn from consideration: 11 and 13-20.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☒ Other: PTO-892.

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Advisory Action

1. The amendment filed on March 21, 2005 under 37 CFR 1.111 in reply to the final rejection has been entered and considered but is not deemed to place the application in condition for allowance for the reasons of record as set forth in the Final Office Action mailed on December 23, 2004.

Terminal Disclaimer

2. The terminal disclaimer filed on March 21, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,446,814 has been reviewed and is accepted. The terminal disclaimer has been recorded. The obviousness-type double patenting rejection of claims 8-10, and 12 has been withdrawn.

Response to Arguments

3. Applicants' arguments filed March 21, 2005 have been fully considered but they are not persuasive.

The Examiner's Note: the relevant part of the KR 8902848 was translated at USPTO by Primary Examiner Tae Yoon on April 26, 2005. It is now confirmed that the adhesive is applied to the entire inner side of the nonwoven fabrics, and the purpose and function of the adhesive is for securing silver-added active carbon and untreated carbon thereto (See page 2, paragraph 3).

(A) Applicants argue that the reference KR 8902848 does not teach the step of applying of metal ion yielding material in particle form to the adhesive. It is noted that a review

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of the copy of the reference KR 8902848 obtained from the Office revealed that reference KR 8902848 fails to teach the application of silver active carbon and untreated active carbon to an adhesive. To the contrary, the Applicant respectfully submits that KR 8902848's disclosure of "... filling between two . . . permeable nonwoven fabrics (coated with adhesive on the inner side only) with silver-added active carbon ... and untreated active carbon by alternating the silver-added active carbon and untreated carbon in repetition; in repeating ... " (emphasis added.) teaches away from the step of "applying a metal ion yielding material in particle form to the adhesive." Note for example that the "filling" between the two permeable nonwoven fabrics with silver-added active carbon and untreated active carbon requires the presence of a pocket or compartment located between the two permeable nonwoven fabrics for receiving the active carbon. The presence of an adhesive located on the interior walls of the pocket or compartment would cause the region of the two permeable nonwoven fabrics comprising the pocket or compartment to secure to each other thereby leading to the collapse of the pocket or compartment.

The Examiner respectfully disagrees with this argument. First of all, no pocket or compartment located between the two permeable nonwoven fabrics are taught by KR 8902848. Therefore, it is obvious that silver-added active carbon and untreated carbon are maintained between the two nonwoven fabrics only by adhesives and "**heat-sealing**". As was discussed above, KR 8902848 teaches that the silver-added active carbon and untreated carbon are held between the two nonwoven fabrics by adhesives and "**heat-sealing**". See the Examiner's Note above.

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(B) Applicants argue that although the reference KR 8902848 discloses in parentheses that the inner side of the nonwoven fabrics is coated with adhesive, the reference KR 8902848 does not teach whether the aforementioned adhesive coating is limited to just a portion of the inner side of the nonwoven fabrics or to the entire inner side of the nonwoven fabrics. Further note that the KR 8902848 reference also fails to teach the purpose or function of the adhesive, for example whether the adhesive coating is for securing the nonwoven fabrics of KR 8902848 together or for securement of silver-added active carbon and untreated carbon of KR 8902848 thereto.

It is held that during patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). See also MPEP 2111.

Therefore, even if the purpose or function of the adhesive in KR 8902848 can be interpreted as for securing the nonwoven fabrics of together or for securement of silver-added active carbon and untreated carbon, KR 8902848 would still teach both possible uses of the adhesive. Now this statement is confirmed. See the Examiner's Note above.

(C) Applicants argue that the reference KR 8902848 does not teach the securement of the silver-added active carbon and untreated carbon to the permeable nonwoven fabrics by allowing the adhesive to dry.

The Examiner respectfully disagrees with this argument. One of ordinary skill in the art would know that any time adhesive is used, it is either dried (in case of solvent-based adhesives), or pressed (in case of pressure-sensitive adhesives) or cooled (in case of hot melt adhesives).

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Since KR 8902848 does not teach any particular adhesive it is either dried after applying the active carbon or pressed or cooled.

(D) Applicants argue that Rosenblatt does not teach the use of an adhesive formed from PVA without iodine in making an article for in situ water treatment as called for in Applicant's independent method claim 10.

The Examiner respectfully disagrees with this argument. Rosenblatt teaches that PVA resins are used to coat many types of fibers, **bonding well** to their surfaces to aid in their processing, and PVA suppliers make *special grades* of PVA to fulfill these needs. These specialty grades of PVA can be adapted to coat many types of fibrous and porous matrixes, e.g. polyesters, metal screens, fiberglass, and urethane foam filters, non-woven cloths, and woven cloths, and when cured, give all these base matrixes iodine complexing potential to produce, e.g. antimicrobial versions of water filters, antifungal and antimicrobial substrates in air conditioning systems. See column 8, lines 1-12. In other words, PVA resins **bond well** to many types of fibrous and porous matrixes, e.g. polyesters, metal screens, fiberglass, and urethane foam filters, non-woven cloths, and woven cloths, and have iodine complexing **potential** to produce iodine versions of water filters. Therefore, one of ordinary skill in the art at would have reasonable expectation of success in using PVA (with or *without* iodine) as an adhesive of Patent '814 because Rosenblatt teaches that PVA bonds well to any kind of materials and can be used in water filters.

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Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (571) 272-1429. The examiner can normally be reached on Mo-Thur. 9:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-141523. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ELENA TSOY
PRIMARY EXAMINER
E Tsoy

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Primary Examiner
Art Unit 1762

April 26, 2005